IMPACT OF OWNERS’ EDUCATION AND WORK EXPERIENCE ON THE GROWTH OF HANDICRAFT SMEs IN PAKISTAN

Ayaz Ahmed Chachar
Dr.Zareen Abbasi
Adeel Ahmed Chachar

ABSTRACT

The general purpose of this study is to investigate factors that positively affect growth in the small and medium size enterprises (SMEs). Preliminary research highlighted the fact that few (if any), past studies had focused on the owners of SMEs and in particular if educational attainment and work experience had had any effect upon business growth. The author had a particular interest in Pakistani SMEs and coming from Sindh, was interested in investigating these factors in Handicraft SMEs currently operating/located in Hyderabad, as (despite being significant local employers), handicraft SMEs in the Hyderabad region have (due to socio-political and socio-economic reasons), long been neglected by local and regional government.

In this study (after undertaking secondary research and following the literature review stage), the author concluded that a face-to-face structured interview with the owners of SMEs in the handicrafts sector, combined with a short questionnaire approach to data collection, would yield the best results given the limited budget and short timeframe.

The results of this (albeit small-scale and limited) study, indicate that there was indeed some evidence of a positive link between the level of education (as well as the experience), of Hyderabad SME owners and business growth. At the very least, this highlights the need for further study, whilst at the same time making Hyderabad’s policy-makers aware of the potential benefits of investing in educational support for owners of local SMEs.

Key Words: Owners’ Education, Experience, Handicraft, Growth, SMEs.

INTRODUCTION

SME-led economic growth has become the hallmark of economic prosperity and general well-being in the world (Mulhern, 1995; Schlogl, 2004). SMEs are globally recognized as critical for economic development and poverty alleviation (Coy et.al., 2007; Mulhern, 1995). In Pakistan, nearly 99 percent of economic establishments are SMEs; absorbing 80 percent of unskilled labor (Pakistan Economic Survey,
2011-12). These SMEs are collectively providing undeniable support to economic growth by contributing 40 percent to GDP and 30 percent to the exports from the manufacturing sector (Pakistan Economic Survey, 2011-2012).

The general purpose of this study is to investigate factors that positively affect growth in Small and Medium Size Enterprises (SME). Preliminary research highlighted the fact that few (if any), past studies had focused on the owners of SMEs and in particular if educational attainment and work experience had had any effect upon business growth. The author had a particular interest in Pakistani SMEs and coming from Sindh, was interested in investigating these factors in Handicraft SMEs currently operating/located in Hyderabad, as (despite being significant local employers), handicraft SMEs in the Hyderabad region have (due to socio-political and socio-economic reasons), long been neglected by local and regional government.

At present handicrafts manufacturing is a growing and increasingly important sector in Hyderabad and surrounding areas (Murlidhar et.al., 2007, Rohra and Junejo, 2009). However the role and impact of education and experience upon success in SMEs in the socio-economic milieu of the Hyderabad region has largely been ignored, as many businesses are family owned and managed and (more often than not), control is handed down to the eldest son irrespective of educational attainment or business experience (Rohra and Junejo, 2009; Shah et.al., 2011).

Globally, research into the impact of owners’ education and work experience on SME success is very limited but even more so in terms of the handicraft sector. Past studies into SMEs have hinted at the potential role of education and experience in SME success (Junejo et.al., 2008; Shah et.al., 2011), but the scope and reach of these studies was very limited.

THEORETICAL FRAME WORK AND LITERATURE REVIEW
Factors contributing to growth of Handicraft SMEs
The literature mainly describes the factors assumed to influence small and medium enterprise growth.

Owner’s Education
- Formal Education (Packalen, 2007; Zhang and Wong, 2008; Burns, 2008).
- Business Education (Kuratko’s, 2003; Johannison, 1991; Karmel and Bryon, 2002).
Owner’s work experience

- Prior work Experience (Haber and Reichel, 2007; Perez and Pablos, 2003; Anakwe, and Greenhaus, 2000).
- Experience in the same Industry (Hatch and Dyer, 2004; Goedhuys and Sleuwaegan, 2000).

The Government of Pakistan has vehemently recognized the efficacy of education in the success of SME business in the country. This is amply demonstrated in national educational policy, which aims at making the country’s education system more meaningful and relevant, presents government’s commitment to the creation of a knowledge-based society. Nevertheless, the government has to overcome the basic constraints to achieve this hallmark besides providing easy access to and inexpensive but quality education to its people. However, many researchers (Gorman et.al., 1997; Junejo et.al., 2008; Wanigasekara and Surangi, 2010; Shah et.al., 2011) have studied owners’ education and work experience in SMEs business in general and handicrafts SMEs growth in particular.

A Link between Owner’s Formal Education & Growth of Venture

This research is based on cognitive theory. According to this theory, scholars take a stance that cognitive factors such as education background; previous industry experience; family background; ethnicity; and skills influence entrepreneurs to establish and grow ventures (Packalen, 2007; Zhang and Wong, 2008; Burns, 2008). Entrepreneurs with adequate information and prior industry experience assess risks better than others, which make them to take risks in achieving innovative products for high growth (Keizer et.al., 2005). They regard innovation as less risky and promote innovative products for high income.

Gartner and Vesper (1994) assert that in spite of ceaseless discussion about the efficacy of education provided by universities, colleges and business schools/Alma meters, the number and variety of small and medium business programs offers has increased relatively in Europe, Asia, North America, Australia and New Zealand. However, according to Brockhaus et.al., (2001) and Solomon (2007) there has been an enormous growth of owner’s education in the US during the academic years 1990 to 2005. Shane (2003) touches another aspect saying as the provision of enterprise education is on the rise; the interest level of students in at business schools/universities is also increasing with the corresponding acceleration of ventures’ growth.
This current research is exceptional in nature from Pakistan’s context as it does not evaluate enterprise programs per se. Instead, it examines between owners’ educational levels and the growth of handicraft SMEs. The researchers such as Leonhardt (1996) and Peter and Brijlal (2011) state that those who are less educated/uneducated face number of chronic problems like they lack vision to carry out the business plan, lack competitiveness to manage the operational aspects of the business and usually avoid innovation/improvisation in product manufacturing or delivery. On the other hand, who have got a higher and professional education from college/universities will prove to be qualified owners for new small and medium enterprises or work as accomplished employees in small business. Hence the framework of Peter and Brijlal (2011) will be creating a theoretical base for this study. The main focus of the current study will be on the acquisition of professional degree and its impact on the growth side of SME since the owner is a controlling authority and principle accounting head of an SME.

**Impact of Higher Education on SMEs**

A survey of SMEs in Surrey, UK held in (2005) reveals that when the growth orientation and owners’ education are put on close observation, the lack of owners’ education and workers with sufficient skills in the use of new equipment is a major impediment to growth and the growth oriented business tends to employ more educated owners for the growth of business. The data further reveal that the total number of graduate owners is greater in SMEs which is (46%) and this figure is higher than micro business which is 32% excluding self-employed ones. This is also reflected in the study of Wanigasekara and Surangi (2010) conducted a study in Gampaha district, Srilanka on 33 SMEs owners suggested owner with less education than college degree holders might encounter financial worries as compared to those with more educated one and are not able to maintain their business activities in the market. It is also common with less educated that they find it difficult to have a better relationship with the family members to grow in business.

A study (Meng & Liang, 1996) held in Singapore supports this contention that those owners who have attained formal education in universities or colleges are more successful than those who have no such qualification. Therefore, the ratio of successful owners is 70% who are university graduate (formal education); while 23% are not. Educated owners were working hard, self-confident, risk taking, self-controlled, innovative, and autonomous. Kim study will be useful because the current
research will also consider his reason as he mentioned in her study for growth oriented owners.

**Business Education**

Mitra and Matlay (2004) have also mentioned the role of other factors that leave an impact on owners regarding their perception of business growth. However, Kuratko’s (2003) contention is that the venture education or professional training does contribute in terms of teaching/tutoring some of the aspects of business, like growth and sales, turnover, in the processes of owner’s activities. Johannison (1991) is of the opinion that model of owners education is not be-all and end-all for everyone to follow. He further comments logically that business schools’ motto i.e., making individuals innovative and owners of small business, when dissected in terms of time and scope, seems not more than rhetoric. Rae (1997) dilates on it terming the skills academically taught in business schools, although essential; do not cater to make successful owners. According to Matlay (2006) and Karmel and Bryon (2003) the discussion, about the topic that whether the business schools/Alma meters are really contributing significantly in the quantitative and qualitative development of entrepreneurial capital/investment that operates in the national economy, is ceaselessly going on.

**The Importance of Business Education in SMEs**

Business education has got focal importance during last 20 years in the growth of handicraft SMEs on account of young and promising owners aspiring to make the business success (Colff, 2004, Emiliani, 2004). The idea of relating the aptness and application of management education with the success of SME business owners and entrepreneurs is being challenged. The business educators must bring balance in needs of three role players i.e., student, the SME he or she works for and the business school itself (Handy, 2002; Emiliani, 2004). However, the business schools are required to develop managerial capabilities among the owners, who through their intellect and acquired values will bring about transformational process in future (Bosch and Louw, 1998). One of the responsibilities of the management educators is to inculcate in motivated students the spirit of thinking about business as well as managing it (Formica, 2002). Therefore, there is a dire need of balance between conventional content of knowledge (finance, strategy and human resources) and business skills (team skills, problem solving and innovative thinking).
At the outset of 21st century the Government of Pakistan along with Higher Education Commission (HEC) overhauled the overall education system in the country by establishing various universities and business schools and introducing numerous scholarship schemes. These changes in the education system of the country have left substantial sway on the growth and development of education.

Owners’ Work Experience

The idea of owner’s work experience carries the concept of work experience of an owner attained during the previous business and it is being utilized in new business settings by using previous business links with customers and suppliers in day-to-day business transactions that the owner established earlier (Haber and Reichel, 2007). Owners’ work experience helps them identify new market opportunities and convert them into a profit, sales, increase in number of employees and customers (Perez and Pablos, 2003). Thus certain experiences enable the owner to develop a kind of business base of growth determinants like entrepreneurial understanding, web of business connections and gem of business information that culminate into a fine product manufacturing and service delivery (Basu and Goswami, 1999; Westhead et.al., 2001). The owners with prior experience of same kind can utilize previous relationships with customers and suppliers in the operation when it comes to establishing or developing new handicraft business (Haber and Reichel, 2007).

Prior Work Experience

At the time recruiting the newcomers for given job, the majority of recruiters favorably prefer the candidates possessing prior work experience over those who are fresh in the field. This context shows the meaning of prior experience which means a kind of experience that is gained by a person during internship or at initial stage and enters into a venture that requires same kind of experience (Anakwe, and Greenhaus, 2000). Keeping view the context of prior experience, the organizations consider the candidature of a person by looking at his/her prior experience gained in the conditions, their exposure to the markets and business, nature of particular skills commensurate with the work and business transactions (Altinay and Wang, 2011). Whereas, it is also necessary to analyze the relevance, the positive side and prospects of prior experience to the requirements of any organization.
However, it is an established fact that individual experience is considered to be of vital importance in terms of seeking or learning business tactics or technicalities involving business deals (Huber, 1996) which pave way to resort to the innovative strategies (Haynes, 2003). Thus, the prior business experience grabbed during business transaction or activities is a great source of knowledge base which helps in forming and making innovative business plans and approaches (Bakhru, 2004). Grant and Romanelli (2001) have also supported this contention that the prior experience forms a knowledge base that is very significant in the creation of new routines and capabilities to bring innovation in cross-cultural handicrafts. In support of this argument, Alvarez and Busenitz (2001) have emphasized that the managers with prior experience, are capable of utilizing their skills and experience in capitulating on exploiting new resources for innovation and improvisation during SME activity (Alvarez and Busenitz, 2001).

**Same Industry Work Experience**

The same industry work experience is one of the major determinants while embarking on the new bus. The semi structured interview and questionnaire survey are considered more adapted and embraced for this study keeping in view the research objectives and review on the suitability of different research strategies and their use in growth of SME research. The purpose of interview is to gather owners’ contentions on their level of education, work experience and their bearing on the growth of SMEs in terms of profit, sales, number of employees and customers respectively. The interview will also help to find out any supplementary factors with considerable significance and impact on the growth of SMEs which have not so far been in the literature review. The questionnaire survey is used to dig out owners’ education and work experience by means of exploratory factor analysis and data analysis results. This survey is meant to be used for recommending owners’ education and work experience in line with the growth variable frameworkness venture and its consequent success in competitive market (Hatch and Dyer, 2004; Goedhuys and Sleuwaegen, 2000). The chief characteristic of same industry work experience enables the decision-makers take risks during business transactions or activities (Brockhaus, 1980; Goedhuys and Sleuwaegen, 2000; Jones-Evans, 1996). This fact is well supported by the research that the fear and uncertainties rules the roost in international business milieu. The same industry experience helps
the owner get rid of certain fears and uncertainties especially in international market Ibeh and Young, 2001).

Sample and Data Collection
The study was carried out in Sindh province, Islamic Republic of Pakistan. The owners involved in the local handicraft productions were incorporated who have been controlling handicraft business in the region and in order to have proper representation of the respective industry, the researcher covered all sectors of handicrafts. A stratified random sampling was used for collecting data, which provided an equal chance to all the participants (Cohen et.al., 2005; Wisker, 2007). One hundred forty respondents were selected at random for the purpose of data-collection using close-ended questionnaires. These respondents were based in the four clusters of handicraft SMEs based in Hyderabad region. From each cluster, thirty five respondents were chosen at random. There were two criteria for selecting the stratified sample:
- Enterprises fulfilling the definition of SMEs.
- Enterprises in operation for more than 42 months so that their growth can be calculated over a period of at least three years.

Material and Method
The data were collected through questionnaire survey are considered more adapted and embraced for this study keeping in view the research objectives and review on the suitability of different research strategies and their use in growth of SME research. The questionnaire survey is used to find out owners’ education and work experience by means of exploratory factor analysis and data analysis results. This survey is meant to be used for recommending owners’ education and work experience in line with the growth variable framework. Timeline involved in the survey was from December 2012 to January 2013. Out of the total 140 questionnaires, only 120 questionnaires were filled in by the respondents and were analyzed for findings however ten questionnaires were found unusable on account of incomplete information that lacked basic evidence of record. The test was executed using the Statistical Package for the Social Science (SPSS) to test the hypothesis that the impact of owners’ education and work experience on the growth of SMEs independently and significantly.

A variety of financial measures have been utilized in the literature to evaluate SMEs growth, such as Profit (Gundry and Welsch, 2001; Formica, 2000; Chaganti et.al., 2002; Delmar et.al., 2003; Freel and
Robson, 2004; Parker, 2004; Neshamba, 2006), Sales (Rosa et al., 1996; Neshamba, 2006; Majumdar, 2008), Number of employees (Delmar et al., 2003; Carree and Thurik, 2003; Bruce, 2009), Number of customers (Navarro et al., 2012). However, for this study, only compound profit, sales, number of employees and customers were adopted. One of the main reasons for doing so was the fact that extracting information from owners about annual profit, sales, number of employees and customer respectively (Rosa et al., 1996).

Based on method adopted by Basu and Goswamy (1999) sales, number of employees and customers growth was measured as:

Sales/Turnover as, \( S_i = S_j (10 + r/100)^a \)

Where \( S_i \) is current sales generated in most recent years (i.e. 2010-11), \( S_j \) is sales at start up, \( a \) denotes number of years since start-up, and \( r \) is the compound average growth rate of sales since start-up.

Number of employees as \( E_i = E_j (10 + r/100)^a \)

Where \( E_i \) is current employment (i.e. 2010-11), \( E_j \) is employment at start up, \( a \) denotes number of years since start-up, and \( r \) is the compound average growth rate of employment since start-up.

Customers as \( C_i = C_j (10 + r/100) \)

Where \( C_i \) is current number of customers (i.e. 2010-11), \( C_j \) is customers at start up, \( a \) denotes number of years since start-up, and \( r \) is the compound average growth rate of employment since start-up.

There were four independent variables; formal education, business education, prior work experience, and current experience in the same industry whereas and four dependent variables are profit, sales, customers, and employees. Sixteen hypotheses were analyzed using bivariate analysis (correlation) regression. The correlation analysis helped to know the strength of the relationship between independent and dependent variables. Qualitative data analysis begins in parallel with the data collection process, an important part of which is to make theoretical sense of the empirical data using reduction techniques. The data were analyzed using well-known approaches to research studies (Yin, 1989). ‘Narratives’ from the respondents were organized around specific questions, allowing for flexibility and modification during the progression of the analysis, integrating evidence from different elements of the data (Yin, 1989).
The relationship of formal education with all the four dependent variables was calculated by applying Pearson correlation formula. The results are shown in Table 7.2. The results show that formal education has a positive correlation with all the four growth variables. There is a significant relationship between formal education and profit ($r = .321$ at $P < .05$), which supports the hypothesis H1a – Handicraft business owners in Pakistan with higher formal education will generate higher profit.

The correlation of formal education and sales growth has values ($r = .421$ at $P < .01$) supporting hypothesis H1b - Handicraft business owners in Pakistan with higher formal education will generate higher sales/revenues. Similarly, hypothesis H1c (Handicraft business owners in Pakistan with higher formal education will show higher number of employees); and H1d (Handicraft business owners in Pakistan with higher formal education will show higher customers growth) are also supported with $r = .511$ and .352 respectively at $P < .01$ level.

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>Min.</th>
<th>Max.</th>
<th>Mean</th>
<th>Std. Dev.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Formal Education (FE)</td>
<td>120 (100%)</td>
<td>1</td>
<td>6</td>
<td>3.897</td>
<td>2.546</td>
</tr>
<tr>
<td>Business Education (BE)</td>
<td>120 (100%)</td>
<td>0</td>
<td>1</td>
<td>0.421</td>
<td>.628</td>
</tr>
<tr>
<td>Number of years of work experience (NYWE)</td>
<td>120 (100%)</td>
<td>0</td>
<td>14</td>
<td>3.843</td>
<td>4.56</td>
</tr>
<tr>
<td>Experience in the Same Industry (ESI)</td>
<td>120 (100%)</td>
<td>0</td>
<td>1</td>
<td>0.791</td>
<td>.523</td>
</tr>
<tr>
<td>Profit (PG)</td>
<td>104 (86.67%)</td>
<td>2.55</td>
<td>167</td>
<td>45.54</td>
<td>65.43</td>
</tr>
<tr>
<td>Sales (SG)</td>
<td>116 (96.67%)</td>
<td>29.3</td>
<td>220</td>
<td>110.21</td>
<td>42.76</td>
</tr>
<tr>
<td>Employees (EG)</td>
<td>120 (100%)</td>
<td>18</td>
<td>142</td>
<td>88.90</td>
<td>39.23</td>
</tr>
<tr>
<td>Customers (CG)</td>
<td>114 (95%)</td>
<td>21.4</td>
<td>219</td>
<td>78.43</td>
<td>82.23</td>
</tr>
</tbody>
</table>
TABLE-2
CORRELATION OF FORMAL EDUCATION AND DEPENDENT VARIABLES

<table>
<thead>
<tr>
<th>Variable</th>
<th>Formal Education (FE)</th>
<th>Profit (PG)</th>
<th>Sales (SG)</th>
<th>Customers (CG)</th>
<th>Employees (EG)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Formal Education (FE)</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Profit (PG)</td>
<td>.321*</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sales (SG)</td>
<td>.421**</td>
<td>.254*</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employees (EG)</td>
<td>.511***</td>
<td>.451**</td>
<td>.232**</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Customers (CG)</td>
<td>.352***</td>
<td>.456</td>
<td>.524***</td>
<td>.543***</td>
<td>1</td>
</tr>
</tbody>
</table>

*P<.05, **P<.01, ***P<.001

5.3.2 Business Education and Dependent Variables

The relationship of business education with all the four dependent variables was calculated by applying Pearson correlation formula. The results are shown in Table 3.

TABLE-3
CORRELATION OF BUSINESS EDUCATION AND DEPENDENT VARIABLES

<table>
<thead>
<tr>
<th>Variable</th>
<th>Business Education (BE)</th>
<th>Profit (PG)</th>
<th>Sales (SG)</th>
<th>Customers (CG)</th>
<th>Employees (EG)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business Education (BE)</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Profit (PG)</td>
<td>.211***</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sales (SG)</td>
<td>.372***</td>
<td>.222**</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employees (EG)</td>
<td>.213*</td>
<td>.234*</td>
<td>.432**</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Customers (CG)</td>
<td>.388**</td>
<td>.276**</td>
<td>.236**</td>
<td>.359*</td>
<td>1</td>
</tr>
</tbody>
</table>

*P<.05, **P<.01, ***P<.001

The results show that business education has a positive correlation with all the four growth variables. There is a significant relationship between business education and profit (r = .211 at P<.001), which supports the hypothesis H2a – Handicraft business owners in Pakistan with higher business education will generate higher profit.

The correlation of business education and sales growth has values (r = .372 at P<.001) supporting hypothesis H2b - Handicraft business owners in Pakistan with higher business education will generate higher sales/revenues. Similarly, hypothesis H2c (Handicraft business owners in Pakistan with higher business education will show higher number of
employees) are supported by the correlation results. The values are \( r = .213 \) at \( P < .05 \) level; and H2d (Handicraft business owners in Pakistan with higher business education will show higher customers growth) is also supported with \( r = .388 \) at \( P < .01 \) level.

**Number of Years of Work Experience and Dependent Variables**

The relationship of owner’s number of years of work experience with all the four dependent variables was calculated by applying Pearson correlation formula. The results are shown in Table-4.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Number of years of prior work experience (NYWE)</th>
<th>Profit (PG)</th>
<th>Sales (SG)</th>
<th>Customers (CG)</th>
<th>Employees (EG)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of years of prior work experience (NYWE)</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Profit (PG)</td>
<td>0.314*</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sales (SG)</td>
<td>0.218*</td>
<td>0.287***</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employees (EG)</td>
<td>0.765***</td>
<td>0.222***</td>
<td>0.432**</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Customers (CG)</td>
<td>0.511*</td>
<td>0.227**</td>
<td>0.211**</td>
<td>0.210**</td>
<td>1</td>
</tr>
</tbody>
</table>

* \( P < .05 \), ** \( P < .01 \), *** \( P < .001 \)

The results show that owner’s number of years of prior work experience has a positive correlation with all the four growth variables. There is a significant relationship between owner’s number of years of prior work experience and profit (\( r = .314 \) at \( P < .05 \)), which supports the hypothesis H3a – Handicraft business owners in Pakistan with more number of years of experience will generate higher profit.

The correlation of owner’s number of years of prior work experience and sales growth has values (\( r = .218 \) at \( P < .05 \)) supporting hypothesis H3b - Handicraft business owners in Pakistan with more number of years of experience will generate higher sales/revenues. Similarly, a hypothesis H3c (Handicraft business owners in Pakistan with more number of years of experience will show higher number of employees) is supported by the correlation results. The values are \( r = .765 \) at \( P < .001 \) level; and H3d (Handicraft business owners in Pakistan with
more number of years of experience will show higher customers growth) is also supported with value of $r=.511$ at $P<.05$ level.

**FINDINGS AND DISCUSSION**

The analysis was conducted for four dependent variable, compound profit, sales, number of employees and number of customers respectively. A t-test was performed to determine the effect of independent variables on dependent variables one by one. All the assumptions to be fulfilled for parametric techniques were met including normality. Results were also performed for OLS issues such as linearity, homoskedacity, independence of observations, auto-correlation and co-linearity but no issues were found the final model/equation.

**CONCLUSION**

In conclusion, this study conducted in the city of Hyderabad, Pakistan, employing quantitative data techniques, explores the impact of education and experience on the growth of SMEs in the handicraft sector. It also evaluates the measurements of different growth variables such as profit, sales, number of employees and number of customers. The study confirms that all the four independent variables (formal education, business education, number of years of owner’s experience, and owner’s work experience in the same industry) have a positive impact on enterprise growth in terms of number of customers, employment, sales and profit.

The results and findings of the study contribute to both the knowledge and practice. While this research validates the literature of education and work experience for the growth of SMEs, it also make owners, policy-makers and academicians aware of what role education and experience can play in the survival and success of small and medium enterprises in the handicrafts sector.
RESEARCH IMPLICATIONS

Research Implications for Theory of SME Development: The results of this study make valuable implications to the understanding of owner’s education and work experience and its impact on the growth of SMEs in Pakistan. The study fills the gap in the owner’s education and work experience literature by establishing a set of measures for impacting these factors. The proposal of growth measures serves as a platform for further research on developing and validating items for each factor. The framework of owner’s education and work experience can be used as a research model for SMEs. The methodological approach adopted in this study can also serve as helpful example to inspire other researchers when investigating growth factors in different SMEs sector in different context.

It implies the importance of education for potential owners. Both formal and business education help owners understand the business requirements such as access to resources, generating new ideas and implement modern production methods to achieve innovative products. With knowledge and information gained through formal and ongoing education, owners realize the importance of adopting modern methods of production, latest techniques of developing products in terms of colours, patterns, and designs, and availability of raw material at affordable price. Once this is combined with the contacts made through prior work experience in the same industry, owners get a competitive advantage, as their contacts provide valuable information that helps owners obtain physical assets; financial resources; and raw materials to achieve innovative products; and successfully market them for growth.

REFERENCES


